

Applicant : Jingyue Ju  
Serial No. : 10/591,520  
Filed : June 4, 2007  
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**REMARKS**

Claims 1-15, 18, 20, 22 and 23 were pending in the subject application. By this Amendment, applicant has hereinabove reintroduced two claims previously cancelled without prejudice as new claims 24 and 25. Applicant has also amended claims 1, 2, 8, 9, 15 and 18 for clarity.

Support for amended claim 1 may be found in the specification as originally filed at, inter alia, page 21, lines 15-19; page 17, lines 21-24; page 18, line 15-16; page 21, lines 19-22; Figure 4; page 2, lines 26-29; page 3, lines 1-3; page 17, lines 7-11; page 18, lines 16-21; and page 22 line 30 to page 23, line 4.

Support for amended claim 8 may be found in the specification as originally filed at, inter alia, page 10 to 12; page 17, lines 21-24; page 18, line 15-16; page 21, lines 19-22; Figure 4; page 2, lines 26-29; page 3, lines 1-3; page 17, lines 7-11; page 18, lines 16-21; and page 22 line 30 to page 23, line 4.

Support for amended claim 18 may be found in the specification as originally filed at, inter alia, Figure 6.

Support for new claim 24 may be found in the specification as originally filed at, inter alia, page 15, line 20; Figure 6.

Support for amended claim 25 may be found in the specification as originally filed at, inter alia, page 15, line 25; Figure 6.

Applicant maintains that the amendments to the claims raise no issue of new matter. Accordingly, applicants respectfully request entry of this Amendment.

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#### **New Claims 24 and 25**

New claims 24 and 25 correspond to previous claims 17 and 19 which were cancelled without prejudice in applicant's October 8, 2008 Amendment in response to July 8, 2008 Office Action. The Examiner rejected previous claims 17 and 19 in the July 8, 2008 Office Action as allegedly anticipated by Ju et al. (U.S. Patent No. 6,664,079). The Examiner asserted in the July 8, 2008 Office Action that Ju et al. disclose identical compounds, referring to Sheet 9, Figure 7. In regards to previous claim 17, applicant was claiming 2'-deoxyadenosine-5'-triphosphate (dATP) conjugated to the fluorescent marker, ROX, via a photocleavable linker. However, Ju et al. disclose a 2'-deoxythymidine-5'-triphosphate (dTTP) analogue conjugated to the fluorescent Marker, ROX, via a photocleavable linker. In regards to previous claim 19, applicant was claiming 2'-deoxyuracil-5'-triphosphate (dUTP) conjugated to the fluorescent Marker, R6G, via a photocleavable linker, whereas Ju et al. disclose a 2'-deoxycytosine-5'-triphosphate (dCTP) conjugated to the fluorescent Marker, R6G, via a photocleavable linker. Since the structures of previous claims 17 and 19 are not identical to the compounds disclosed by Ju et al., applicant has reintroduced previous claims 17 and 19 as new claims 24 and 25 respectively.

#### **Rejection under 37 U.S.C. §102(b)**

In the February 3, 2009 Office Action, the Examiner rejected claims 18 and 23 under 37 U.S.C. §102(b) as allegedly anticipated by Olejnik et al. (Pub. No. US2006/0252923 A1). The Examiner asserted that Olejnik et al. disclose a conjugate comprising a nucleotide attached to the fluorescent marker, BODIPY, through a photocleavable linker.

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Applicant's Response

In response, applicant respectfully traverses the Examiner's rejection. Applicant notes that Olejnik et al. disclose a compound with the fluorescent marker, BODIPY-FL-510, conjugated to the nucleotide, 2'-deoxyuridine-5'-triphosphate (dUTP), via a linker molecule. However, applicant is claiming a compound with the fluorescent marker, BODIPY-FL-510, conjugated to the nucleotide, 2'-deoxyguanosine-5'-triphosphate (dGTP), via a photocleavable linker molecule. Applicant further notes that the compound disclosed by Olejnik et al. comprises five methylene groups between the amide nitrogen closest to the fluorescent marker and the amide carbonyl, whereas the claimed compound does not. Applicant maintains the compound disclosed by Olejnik et al. is not identical to the claimed compound. Accordingly, applicant respectfully requests reconsideration and withdrawal of this rejection.

Claim Objections

On page 3 of the February 3, 2009 Office Action, the Examiner objected to claim 20 as being dependent upon a rejected base claim, but would be allowed if rewritten in an independent form, including all of the limitations of the base claim and any intervening claim.

Applicant's Response

Applicant maintains that the structure of claim 18 and the claims dependent therefrom is not taught by the prior art. Accordingly, applicant request withdrawal of this objection.